

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P165486

Luminaire Tested: **VST-E05-LED-E-U-SL4-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165486
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E05-LED-E-U-SL4-HSS-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (105) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9181.4 lumens
Efficiency: N/A
Efficacy: 72.1 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 127.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

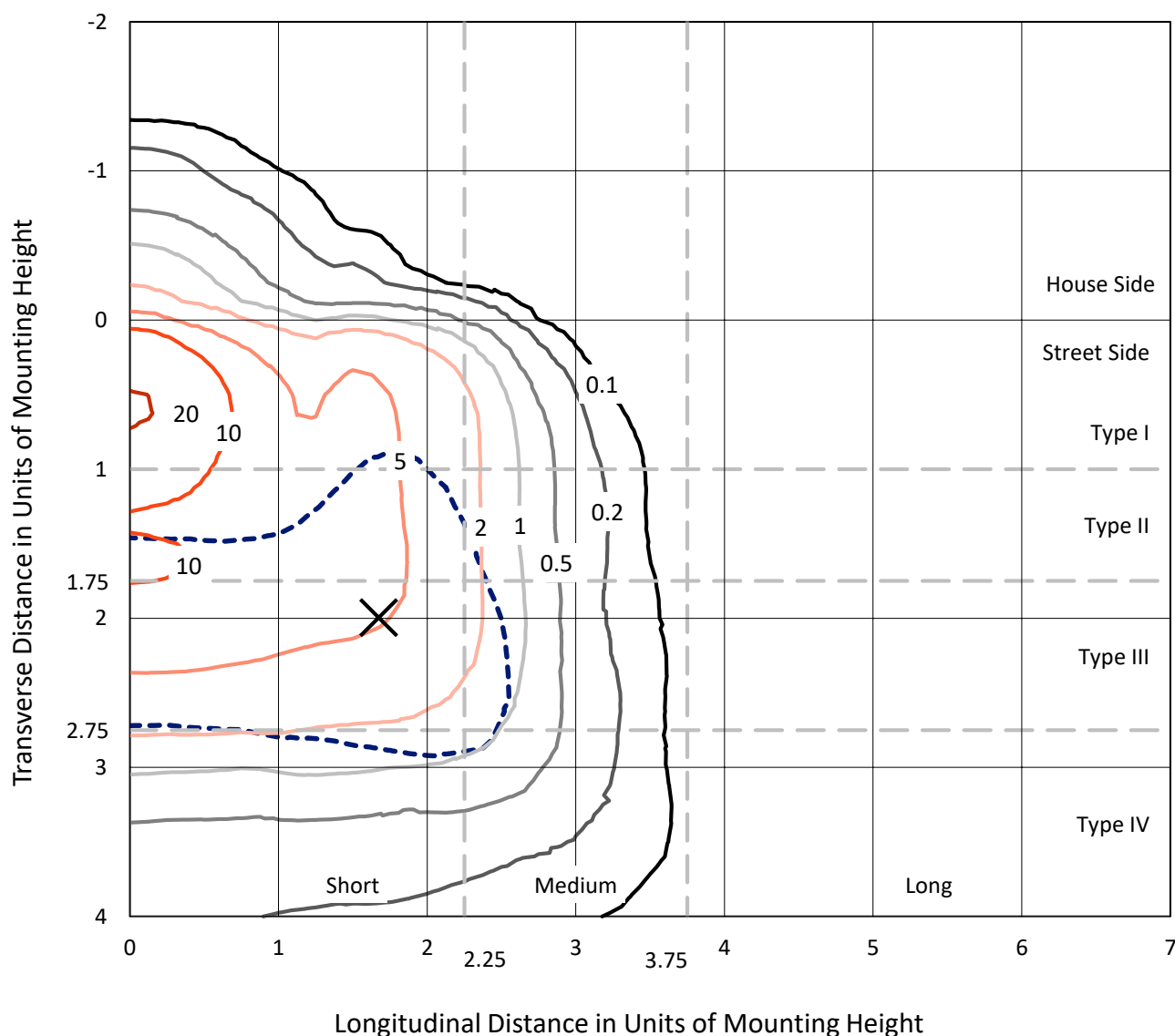


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

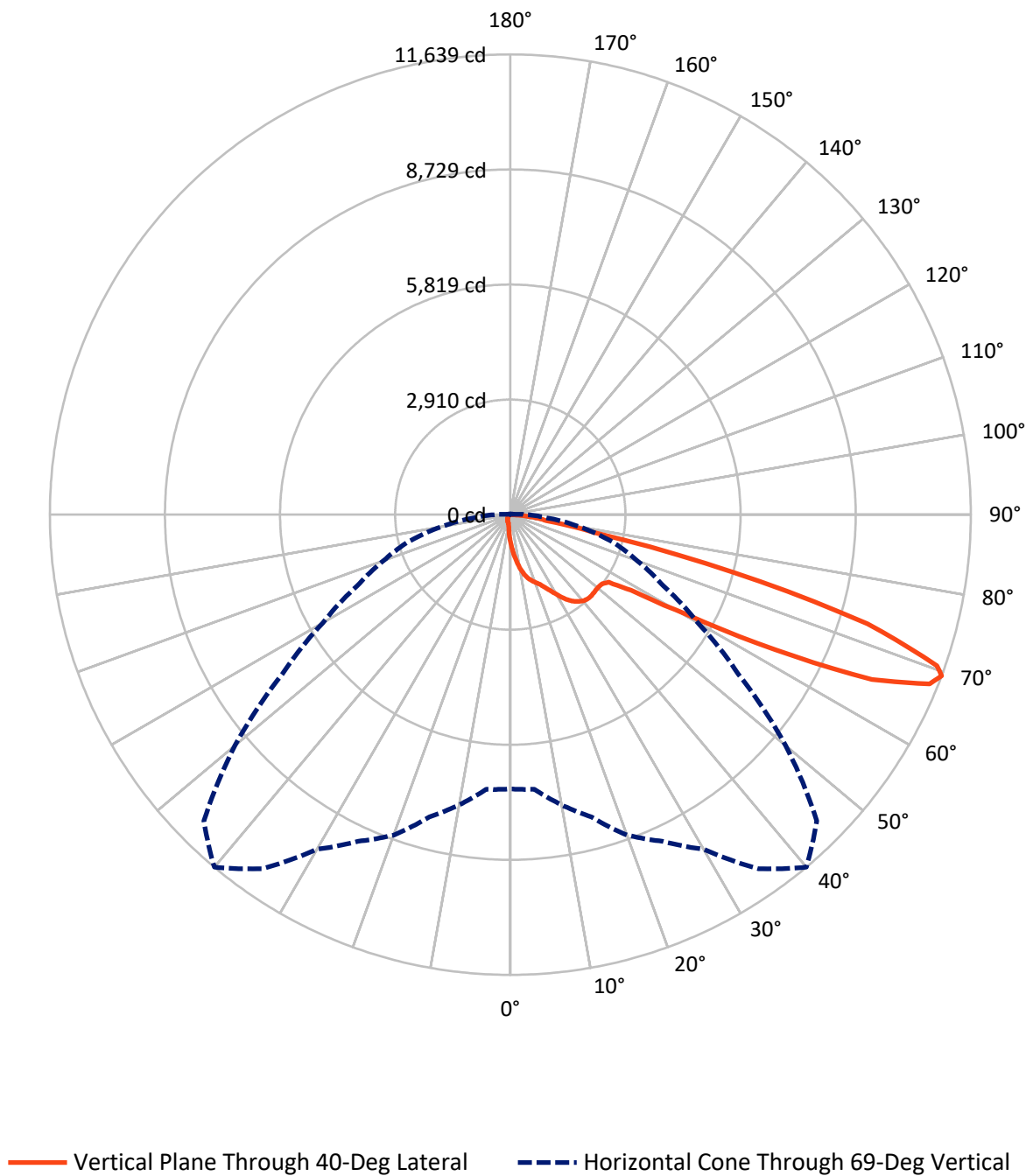


Based on 10 foot mounting height. Maximum calculated value = 20.5 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	273.4	0.0	273.4
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	8908.0	0.0	8908.0
	% Fixture	97.0	0.0	97.0
Total	Lumens	9181.4	0.0	9181.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.3	0.8
10°-20°	245.7	2.7
20°-30°	470.3	5.1
30°-40°	782.1	8.5
40°-50°	1058.3	11.5
50°-60°	1655.1	18.0
60°-70°	3402.8	37.1
70°-80°	1369.2	14.9
80°-90°	126.7	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	9181.4	100.0
0°-180°	9181.4	100.0

Coefficient of Utilization



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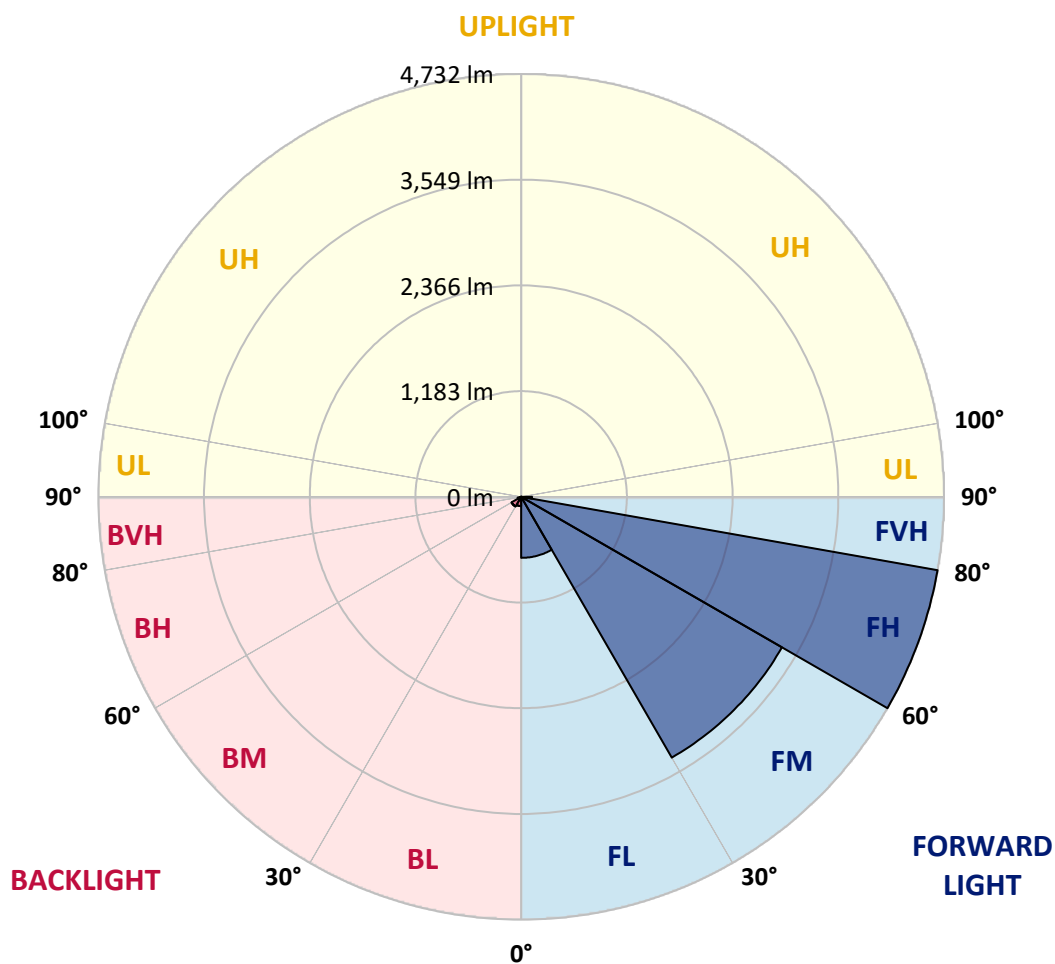
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	683.3	7.4			
FM	(30°-60°)	3370.6	36.7			
FH	(60°-80°)	4732.1	51.5			G2/5000
FVH	(80°-90°)	121.9	1.3			G2/225
BL	(0°-30°)	104.0	1.1	B0/110		
BM	(30°-60°)	124.8	1.4	B0/220		
BH	(60°-80°)	39.9	0.4	B0/110		G0/110
BVH	(80°-90°)	4.7	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	693.4	693.4	693.4	693.4	693.4	693.4	693.4	693.4	693.4	693.4	693.4
2.5°	925.0	914.4	902.4	902.4	887.4	887.4	878.4	854.3	851.3	837.7	824.2
5°	1180.7	1171.6	1156.7	1143.1	1131.1	1110.0	1094.9	1066.3	1034.8	1004.7	977.7
7.5°	1430.4	1425.8	1398.8	1394.2	1374.7	1340.2	1310.0	1267.9	1213.8	1171.6	1122.1
10°	1662.0	1651.4	1645.4	1619.8	1591.3	1553.7	1507.0	1456.0	1392.8	1326.6	1255.9
12.5°	1845.5	1839.5	1812.4	1801.9	1771.8	1734.2	1675.5	1609.3	1546.2	1460.4	1377.7
15°	1982.3	1971.8	1953.7	1937.2	1901.1	1868.1	1813.9	1741.7	1665.0	1571.8	1472.5
17.5°	2096.7	2077.1	2072.6	2047.0	2009.5	1970.3	1910.2	1844.0	1753.7	1660.5	1552.1
20°	2250.0	2223.0	2214.0	2176.3	2132.8	2078.6	2009.5	1926.7	1831.9	1729.7	1618.4
22.5°	2430.5	2411.0	2391.4	2358.4	2302.7	2226.0	2125.3	2035.0	1914.7	1801.9	1681.6
25°	2686.3	2669.7	2638.1	2593.0	2523.8	2432.1	2310.2	2177.9	2036.5	1892.1	1750.7
27.5°	2934.4	2919.3	2896.8	2862.3	2784.0	2683.2	2532.8	2364.4	2185.4	2010.9	1854.5
30°	3167.6	3154.0	3131.4	3096.9	3027.7	2928.4	2758.4	2577.9	2355.3	2152.3	1964.3
32.5°	3418.8	3414.2	3388.6	3339.0	3278.8	3145.0	2960.0	2766.0	2540.4	2305.8	2086.1
35°	3703.0	3668.4	3644.4	3594.7	3492.5	3349.5	3133.0	2920.9	2683.2	2442.6	2197.4
37.5°	3943.7	3910.6	3880.5	3817.3	3692.5	3510.5	3265.3	3032.1	2787.0	2541.9	2292.1
40°	4119.6	4103.0	4067.0	3984.2	3844.4	3627.8	3363.0	3108.9	2862.3	2615.6	2368.9
42.5°	4250.5	4224.9	4184.3	4098.6	3933.2	3686.5	3402.1	3140.5	2896.8	2660.7	2418.6
45°	4298.6	4277.6	4240.0	4146.7	3967.7	3703.0	3400.7	3131.4	2898.3	2674.2	2451.6
47.5°	4270.0	4249.0	4215.8	4128.6	3952.7	3683.5	3373.6	3105.8	2883.3	2678.8	2481.7
50°	4175.3	4163.2	4137.7	4064.0	3906.0	3645.8	3349.5	3092.3	2880.3	2701.3	2523.8
52.5°	4166.2	4158.8	4127.2	4053.4	3892.5	3633.8	3346.5	3099.9	2905.8	2729.9	2553.9
55°	5091.2	4984.4	4745.3	4542.3	4208.4	3811.3	3498.4	3221.7	3014.1	2842.7	2719.3
57.5°	7236.0	7076.6	6762.3	6375.7	5608.6	4855.1	4252.0	3815.8	3600.7	3522.5	3569.1
60°	8240.7	8212.2	8162.5	7979.0	7586.5	6938.3	6216.3	5435.7	5122.8	5095.8	5190.5
62.5°	8717.6	8699.5	8714.5	8692.0	8570.1	8380.6	8173.0	7836.2	7526.3	7326.3	6902.1
65°	8937.1	8949.2	9034.9	9102.5	9117.6	9167.2	9319.2	9738.8	10045.6	9529.7	8352.0
67.5°	8379.1	8449.8	8646.9	8893.5	9182.3	9462.0	9913.2	10797.6	11427.8	10821.7	9149.2
69°	6936.7	6971.3	7452.6	7917.4	8622.8	9116.1	9770.4	10930.0	11638.5	10954.1	9086.0
70°	5461.2	5492.8	6008.7	6640.4	7833.2	8467.9	9323.7	10705.9	11441.4	10778.1	8761.1
72.5°	2463.7	2418.6	2600.5	2938.9	4235.4	5243.2	6739.7	8673.9	9439.5	8634.8	6554.7
75°	1720.7	1701.1	1720.7	1722.1	1923.7	2481.7	3131.4	4701.7	5814.7	5017.6	3131.4
77.5°	1332.6	1319.1	1305.5	1290.5	1314.6	1472.5	1535.6	1668.0	2165.8	2048.6	1194.2
80°	1054.4	1042.3	1075.4	1064.9	1064.9	1083.0	1070.9	1021.2	928.0	860.3	770.0
82.5°	490.3	493.3	493.3	535.4	645.3	753.5	788.1	738.5	655.8	558.0	449.7
85°	46.6	52.6	88.8	136.9	272.3	306.8	308.3	255.6	255.6	201.6	162.4
87.5°	0.0	1.5	1.5	1.5	13.5	37.6	31.6	9.0	4.5	4.5	7.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	693.4	693.4	693.4	693.4	693.4	693.4	693.4	693.4	693.4	693.4	693.4
2.5°	800.2	795.6	777.6	759.5	743.0	724.9	708.4	691.9	673.8	660.3	643.7
5°	935.5	902.4	864.9	828.8	792.6	755.1	716.0	681.4	645.3	612.1	580.5
7.5°	1072.4	1007.7	956.6	891.9	833.2	774.6	720.5	664.8	613.7	565.5	520.4
10°	1188.2	1110.0	1030.3	947.6	863.3	785.1	709.9	643.7	576.1	517.4	461.8
12.5°	1283.0	1183.7	1086.0	982.1	887.4	788.1	694.9	615.1	535.4	469.3	412.1
15°	1368.7	1254.4	1137.0	1016.7	896.5	783.7	679.8	580.5	499.3	424.2	359.5
17.5°	1437.9	1307.0	1174.7	1039.3	910.0	777.6	660.3	556.5	461.8	383.5	320.4
20°	1498.1	1361.2	1218.3	1066.3	919.0	776.1	643.7	526.5	428.6	346.0	284.2
22.5°	1553.7	1416.8	1263.4	1101.0	932.5	774.6	628.7	503.9	400.0	317.4	255.6
25°	1616.9	1472.5	1311.6	1137.0	956.6	780.6	619.7	485.8	374.5	290.3	233.1
27.5°	1687.6	1535.6	1368.7	1182.1	988.2	792.6	616.7	466.3	351.9	264.7	215.1
30°	1786.8	1610.9	1425.8	1227.3	1016.7	806.2	613.7	454.2	329.4	245.1	197.0
32.5°	1874.1	1684.6	1489.0	1273.9	1048.3	819.7	612.1	437.7	308.3	225.6	183.5
35°	1965.8	1752.3	1543.2	1319.1	1075.4	834.7	610.7	425.6	288.8	206.1	170.0
37.5°	2045.5	1809.3	1585.3	1358.2	1105.5	848.3	612.1	415.1	270.7	189.5	157.9
40°	2113.2	1868.1	1631.9	1394.2	1137.0	869.3	613.7	404.6	252.7	174.4	147.4
42.5°	2173.4	1923.7	1681.6	1434.9	1173.2	893.4	622.7	395.6	237.7	160.9	136.9
45°	2220.0	1974.8	1735.6	1492.0	1231.8	932.5	639.3	389.5	222.6	148.9	127.9
47.5°	2268.1	2050.0	1827.4	1582.3	1317.6	994.2	667.8	388.1	210.5	139.8	120.3
50°	2334.3	2125.3	1908.6	1674.0	1395.8	1057.4	702.4	389.5	195.5	130.9	112.8
52.5°	2382.5	2201.9	2013.9	1833.5	1582.3	1249.8	836.3	416.6	188.0	123.3	103.8
55°	2666.7	2635.1	2639.6	2669.7	2475.7	2126.7	1398.8	601.6	221.1	139.8	102.3
57.5°	3760.2	3871.4	3936.1	3934.6	3614.2	2997.6	1878.6	773.1	246.7	162.4	121.8
60°	5198.1	5113.8	4995.0	4701.7	4276.0	3421.8	2101.2	831.8	213.5	129.3	111.3
62.5°	6469.0	5975.6	5537.9	5062.7	4504.6	3569.1	2146.3	827.2	186.5	97.7	78.2
65°	7261.6	6374.2	5667.3	5071.7	4414.4	3445.8	2030.5	759.5	157.9	79.7	64.7
67.5°	7451.1	6159.1	5159.0	4399.3	3687.9	2681.8	1490.5	571.6	123.3	66.2	57.2
69°	7037.5	5474.8	4274.6	3412.7	2683.2	1779.3	922.0	361.0	94.7	60.2	52.6
70°	6473.5	4761.8	3481.9	2738.9	1986.9	1249.8	645.3	254.2	76.7	55.6	48.1
72.5°	4164.8	2501.2	1711.6	1191.2	819.7	497.9	252.7	114.4	58.6	46.6	39.1
75°	1615.4	925.0	670.9	509.8	398.6	276.7	153.4	73.7	49.6	39.1	30.0
77.5°	795.6	609.1	497.9	341.4	198.6	123.3	82.7	57.2	40.6	28.6	19.5
80°	628.7	418.1	249.7	154.9	117.3	88.8	63.2	46.6	30.0	18.1	13.5
82.5°	321.9	176.0	129.3	105.3	87.2	69.2	51.1	33.1	19.5	12.1	10.5
85°	100.7	73.7	66.2	64.7	60.2	49.6	36.1	21.1	12.1	7.5	7.5
87.5°	7.5	10.5	13.5	10.5	12.1	10.5	13.5	9.0	6.0	6.0	4.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	693.4	693.4	693.4	693.4	693.4	693.4	693.4	693.4	693.4	693.4	693.4
2.5°	631.7	613.7	597.1	586.6	567.0	559.5	552.0	549.0	535.4	538.4	526.5
5°	552.0	520.4	496.3	472.3	449.7	433.2	419.6	403.1	389.5	383.5	371.5
7.5°	479.8	439.2	407.6	382.1	354.9	333.9	315.8	303.8	291.8	279.8	273.7
10°	416.6	373.0	336.9	311.4	285.8	267.7	254.2	245.1	237.7	233.1	231.6
12.5°	357.9	315.8	282.8	260.2	240.7	231.6	225.6	221.1	219.6	218.1	218.1
15°	312.8	270.7	245.1	228.6	219.6	215.1	213.5	210.5	207.6	206.1	206.1
17.5°	270.7	239.1	221.1	212.1	207.6	204.6	201.6	198.6	195.5	194.0	194.0
20°	242.1	216.6	207.6	201.6	197.0	194.0	189.5	186.5	185.0	183.5	182.0
22.5°	219.6	203.0	197.0	192.5	186.5	182.0	179.0	176.0	173.0	171.4	170.0
25°	203.0	192.5	188.0	182.0	176.0	171.4	167.0	162.4	159.5	157.9	154.9
27.5°	191.0	183.5	177.5	170.0	163.9	159.5	154.9	150.4	147.4	144.4	142.8
30°	180.5	173.0	165.4	159.5	151.9	147.4	141.4	136.9	135.4	132.3	129.3
32.5°	170.0	162.4	154.9	147.4	139.8	133.9	130.9	124.9	121.8	120.3	117.3
35°	157.9	150.4	141.4	135.4	127.9	121.8	117.3	112.8	109.8	106.8	105.3
37.5°	147.4	138.4	129.3	121.8	115.8	109.8	105.3	100.7	97.7	94.7	93.3
40°	135.4	126.3	117.3	109.8	103.8	99.3	94.7	90.2	87.2	85.8	85.8
42.5°	124.9	114.4	105.3	99.3	94.7	88.8	84.2	79.7	78.2	76.7	78.2
45°	114.4	103.8	96.3	90.2	85.8	79.7	75.2	72.2	70.7	72.2	73.7
47.5°	105.3	94.7	87.2	82.7	78.2	73.7	69.2	66.2	66.2	69.2	72.2
50°	96.3	85.8	79.7	76.7	72.2	67.7	61.7	60.2	61.7	64.7	67.7
52.5°	87.2	75.2	70.7	69.2	64.7	60.2	55.6	54.2	55.6	58.6	57.2
55°	78.2	66.2	64.7	63.2	58.6	52.6	48.1	48.1	48.1	46.6	43.7
57.5°	75.2	58.6	57.2	55.6	51.1	45.1	42.1	39.1	37.6	33.1	31.6
60°	78.2	52.6	52.6	49.6	45.1	39.1	34.6	30.0	27.0	24.0	24.0
62.5°	63.2	48.1	46.6	43.7	37.6	31.6	27.0	22.6	21.1	19.5	19.5
65°	51.1	43.7	40.6	36.1	31.6	25.6	21.1	18.1	16.5	16.5	18.1
67.5°	46.6	39.1	34.6	30.0	25.6	19.5	16.5	15.1	15.1	16.5	16.5
69°	43.7	36.1	31.6	27.0	22.6	18.1	15.1	15.1	15.1	15.1	16.5
70°	40.6	34.6	30.0	25.6	19.5	15.1	13.5	13.5	15.1	15.1	16.5
72.5°	31.6	27.0	25.6	21.1	15.1	13.5	12.1	13.5	13.5	15.1	15.1
75°	24.0	19.5	19.5	16.5	12.1	10.5	10.5	12.1	12.1	13.5	13.5
77.5°	16.5	13.5	13.5	12.1	10.5	9.0	9.0	10.5	12.1	12.1	13.5
80°	12.1	10.5	9.0	10.5	9.0	7.5	9.0	10.5	10.5	12.1	12.1
82.5°	9.0	9.0	9.0	9.0	7.5	7.5	9.0	9.0	10.5	12.1	12.1
85°	7.5	7.5	7.5	7.5	7.5	7.5	7.5	9.0	9.0	10.5	10.5
87.5°	4.5	4.5	4.5	6.0	6.0	7.5	7.5	7.5	7.5	9.0	9.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: VST-E05-LED-E-U-SL4-HSS-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	693.4	693.4	693.4	693.4
2.5°	523.4	521.9	515.9	517.4
5°	367.0	357.9	364.0	362.5
7.5°	269.3	267.7	266.2	269.3
10°	230.2	230.2	228.6	230.2
12.5°	216.6	216.6	216.6	216.6
15°	206.1	206.1	204.6	204.6
17.5°	194.0	194.0	194.0	192.5
20°	182.0	180.5	180.5	180.5
22.5°	168.4	167.0	167.0	167.0
25°	154.9	153.4	153.4	153.4
27.5°	141.4	139.8	138.4	138.4
30°	127.9	126.3	124.9	124.9
32.5°	114.4	112.8	111.3	111.3
35°	102.3	102.3	100.7	99.3
37.5°	91.8	91.8	91.8	91.8
40°	84.2	85.8	85.8	85.8
42.5°	79.7	81.2	82.7	84.2
45°	76.7	79.7	81.2	81.2
47.5°	75.2	76.7	78.2	78.2
50°	69.2	67.7	67.7	67.7
52.5°	55.6	52.6	51.1	49.6
55°	40.6	39.1	36.1	36.1
57.5°	28.6	28.6	27.0	27.0
60°	22.6	22.6	21.1	22.6
62.5°	19.5	19.5	19.5	19.5
65°	18.1	18.1	18.1	18.1
67.5°	18.1	18.1	18.1	18.1
69°	16.5	16.5	16.5	16.5
70°	16.5	16.5	16.5	16.5
72.5°	15.1	15.1	15.1	15.1
75°	13.5	15.1	15.1	15.1
77.5°	13.5	13.5	13.5	13.5
80°	12.1	12.1	13.5	13.5
82.5°	12.1	12.1	12.1	12.1
85°	10.5	10.5	12.1	12.1
87.5°	9.0	9.0	10.5	10.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)